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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/644,733

08/21/2003

Nick Sherstyuk

PAT 655-2 US

6200

35273

7590

02/24/2005

BEVER, HOFFMAN & HARMS, LLP
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EXAMINER

WHITMORE, STACY

ART UNIT

PAPER NUMBER

2825

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/644,733

Applicant(s)

SHERSTYUK ET AL.

Examiner

Stacy A. Whitmore

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities:

- I. In claim 1, line 8, the phrase "in turn" is objected to because it is unclear what in turn relates to, or is it a phrase meant to be based on an order of analysis of the design variables? For examination purposes, the term is interpreted to mean an iterative type process done on the variables.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Conn (US Patent 5,999,714).

A for claims 1, and 8-9, Conn discloses a method of interactively determining values of design variables for an engineering design, the engineering design having a structure, design variables associated with the structure and metrics for evaluating the performance of the design, the method, system and means for comprising: assigning initial values to the design variables [abstract, col. 5, fig. 1, element 2]; conducting a simulation of the design to determine values of the metrics of the design based on the initial values of the design variables [abstract, col. 5, fig. 1, element 12];

identifying metrics which a designer desires to improve [abstract; col. 5, fig. 1, element 4];

conducting a sensitivity analysis by varying each/one or more sets of design variable in turn over a range of values for the design variable to determine effects of changes in design variables on the metrics [col. 5, line 13 – col. 6, line 22];

selecting one or more/ sets of design variables whose values are to be changed based on the results of the sensitivity analysis [col. 5, line 13 – col. 6, line 22]; and

changing the value(s) of the selected (set of) design variables based on the results of the sensitivity analysis [col. 5, line 13 – col. 6, line 22].

Claim 2. The method of claim 1, further comprising: conducting a simulation based on the revised values to confirm the values of the metrics of the design with revised values [abstract, col. 5, line 13 – col. 6, line 22, fig. 1, element 12].

Claim 3. The method of claim 2. further comprising determining whether a stopping criterion is satisfied and if so terminating the method, otherwise further determining whether the results of the sensitivity analysis remain reliable and, if so, selecting further design variables whose values are to be changed based on the results of the sensitivity analysis and changing the values of the selected further design variables based on the results of the sensitivity analysis [abstract, col. 5, line 13 – col. 6, line 22, fig. 1].

Claim 4. The method of claim 3, further comprising: determining whether a structural change to the design is desired if the further determination of the results of the sensitivity analysis is that they are no longer reliable and if so, changing the structure of the design and conducting a further iteration of the method by assigning initial values to the design variables, otherwise iterating the method by further conducting a sensitivity analysis [abstract, col. 5, line 13 – col. 6, line 22, fig. 1].

Claim 6. The method of claim 1, wherein the step of conducting a sensitivity analysis by

varying each design variable in turn over a range of values comprises varying each design variable over a subset of the range of values of the design variable [abstract, col. 5, line 13 – col. 6, line 22, fig. 1].

Claim 7. The method of claim 1, wherein the step of conducting a sensitivity analysis by varying each design variable in turn over a range of values comprises conducting a sensitivity analysis by varying each of a subset of design variables over a range of values of the varied design variable [abstract, col. 5, line 13 – col. 6, line 22, fig. 1].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Conn (US Patent 5,999,714) in view of McDonald (US Patent 6,530,065).

4. As for claim 5, Conn discloses the invention substantially as claimed, including the method of interactively determining values of design variables, and further wherein conducting a sensitivity analysis by varying each design variable in turn over a range of values for the design variable to determine effects of changes in design variables on the metrics [see as cited in the rejection of claim 1 above].

Conn does not specifically visually presenting results to a designer for review.

McDonald discloses visually presenting results to a designer for review [col. 4, lines 39-57, fig. 1a].

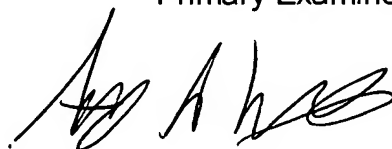
It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Conn and McDonald because visually presenting results to a designer for review because a visual representation of results of circuit design would provide an efficient method for allowing designers easy access to design information which would improve the overall design process increasing design speed and reducing design cost [see McDonald, col. 4, lines 39-57].

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stacy A. Whitmore whose telephone number is (571) 272-1685. The examiner can normally be reached on Monday-Thursday, alternate Friday 6:30am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stacy A Whitmore
Primary Examiner

A handwritten signature in black ink, appearing to read 'Stacy A. Whitmore', is written over the printed name and title.

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SAW